

WHAT IS CLAIMED IS :

1. An emergency moving device of an elevator, comprising
a main moving gear disposed on a top of a car member of the
5 elevator;
a reduction gear fixed on top of said car member and coupled to
said main moving gear;
a plurality of gears coupled to a shaft of said reduction gear for
imparting a turning movement to said shaft of said reduction
10 gear and thereby drive said main moving gear;
a first connecting member releasably coupled to the car member,
said first connecting member being coupled to steel ropes of the
elevator used for vertically displacing the car member;
a second connecting member affixed to the car member and
15 releasably coupled to said first connecting member;
a plurality of chains respectively being connected on one end
thereof to said first connecting member and respectively
engaging said plurality of gears;
a braking switch releasably engageable with said main moving
20 gear for blocking and unblocking rotation of said moving gear;
a hydraulic governor coupled to said main moving gear; and,
a fall prevention device releasably coupling said first connecting
member to said second connecting member;

- whereby when the car member is stopped between floors by a power failure, said fall prevention device is operable to uncouple said first connecting member from said second connecting member in correspondence with release of said braking switch
- 5 from engagement with said main moving gear to thereby lower the car member relative to said first connecting member responsive to displacement of said plurality of chains at a rate controlled by said hydraulic governor, said displacement of said plurality of chains driving said plurality of gears to rotate, said
- 10 main moving gear being driven to rotate against a resistance provided by said hydraulic governor through rotation of said shaft of said reduction gear responsive to side rotation of said plurality of gears.
2. The emergency moving device of an elevator as claimed in
- 15 Claim 1, wherein portions of said plurality of chains are respectively wound around storing equipment.
3. The emergency moving device of an elevator as claimed in Claim 1, wherein said fall prevention member includes an oil hydraulic cylinder having a piston rod removably passing
- 20 through respective holes formed in each of said first and second connecting members for releasably coupling said first connecting member to said second connecting member.
4. The emergency moving device of an elevator as claimed in

Claim 1, wherein said hydraulic governor includes a moving toothed bar engaged with said main moving gear.

5. The emergency moving device of an elevator as claimed in Claim 4, wherein said hydraulic governor further includes a hydraulic cylinder connected to said toothed bar, said hydraulic cylinder including an oil return pipe, and a governor valve coupled in fluid communication with said oil return pipe for adjusting a displacement rate of said toothed bar engaging said main moving gear.

6. The emergency moving device of an elevator as claimed in Claim 1, further comprising a positioning sensor for detecting a position of the car member, said braking switch being operated, responsive to the car member being detected by said positioning sensor, to engage and block said main moving gear from turning when said car is lower to a predetermined position subsequent to said uncoupling said first connecting member from said second connecting member.